

ABSTRACT OF INVENTION

Microbial infection may be treated by administration of a fusion protein comprising one or more recognition sequences and at least one antimicrobial peptide. In preferred embodiments, a linker peptide connects the recognition sequence and one or more antimicrobial peptides. The recognition sequence may be an immunoglobulin molecule, or fragment thereof, that specifically binds to a target antigen present on a pathogen. The recognition sequence may also be a non-immunological polypeptide, providing that the polypeptide binds specifically to a particular ligand. In presently preferred embodiments the recognition sequence is monoclonal antibody that binds specifically to *S. mutans* and the antimicrobial peptides are derivatives of histatin.